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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,855	12/07/2000	Jean-Loup Chretien	MSC-23037-1-SB	8897

24957 7590 08/18/2003

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EXAMINER

LUU, THANH X

ART UNIT	PAPER NUMBER
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2878

DATE MAILED: 08/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/988,855

Applicant(s)

CHRETEN ET AL.

Examiner

Thanh X Luu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-9 and 11-54 is/are pending in the application.
- 4a) Of the above claim(s) 23-38 and 43-50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-9, 11-22, 39-42 and 51-54 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

This Office Action is in response to amendments and remarks filed May 15, 2003. Claims 1-5, 7-9 and 11-54 are currently pending.

This application contains claims 23-38 and 43-50 drawn to an invention nonelected with traverse in Paper No. 3. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, an embodiment in which the incident light is split or redirected to a sensor and a direction of sight is identified or an angle is determined (claims 1 and 50) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 11-15 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Kan et al. (U.S. Patent 5,541,705).

Regarding claims 11-15 and 22 Kan et al. disclose (see Figure 2) a system comprising: a light deflector (5) to redirect incident light of an image being received by a receptor (7); a sensor (10) to receive the redirected incident light; a matrix (16) disposed between the light deflector and the receptor, the matrix comprising a plurality of cells, wherein the opacity of each of the cells may selectively be adjusted; and a controller (8, 9) coupled to the matrix, wherein the controller receives information about the intensity of the redirected incident light from the sensor and adjusts the opacity of one or more cells of the matrix based on the information. Kan et al. further disclose (see column 2, lines 45-50) the matrix comprises a plurality of two-dimensional transmissive liquid crystal display cells, the deflector (5) comprises a beamsplitter, an adjustable lens (1) which receives the incident light and focuses the incident light on the matrix. Kan et al. also disclose (see Figure 5) the sensor (10) comprises a plurality of photoreceptor cells. Lastly, since the device of Kan et al. is automated, it inherently uses a processor and software to control the system.

4. Claims 39-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Barnes (U.S. Patent 5,671,035).

Regarding claims 39-42, Barnes discloses (see Figures 2 and 4) an article comprising a medium (ROM or RAM) storing software which, when executed, causes a processor-based system to: receive light intensity information from a sensor (10) where the sensor is in a plane different (see Figure 4) from a plane of a shading matrix (8);

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compare the light intensity information to predetermined threshold intensity value (see column 8, lines 30-44); and adjust the opacity of one or more cells of the shading matrix (8). Barnes further discloses (see Figures 1 and 4, and column 7, lines 40-49) monitoring (34) a position of a receptor or light source; and adjusting the opacity of additional or a second plurality of cells of the matrix when the position of the receptor changes or is not substantially toward the light source. The receptor includes more than one optical receiver (eyes).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kan et al.

Regarding claims 16-18, Kan et al. further disclose (see column 3, lines 10-15) the beamsplitter passes a smaller percentage in one path than another path. Kan et al. do not specifically disclose the exact ratios in which the light is divided as claimed. However, choosing the specific or optimum amount of deflection percentage for the beamsplitter is a matter of design choice and requires only routine skill in the art. *In re Aller*, 105 USPQ 233. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide such a beamsplitter in the apparatus of Kan et al. as desired to obtain better intensity gauging signals.

Regarding claims 19-21, Kan et al. further disclose (see Figure 5) the sensor comprises a plurality of photoreceptor cells. Kan et al. also disclose (see Figure 1) the sensor located inside a camera body. In controlling the opacity, the controller controls parameters. Kan et al. do not specifically disclose a CCD. However, CCDs are notoriously well known in the art. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a CCD in the apparatus of Kan et al. to provide low cost and efficient photodetection.

7. Claims 1-5 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kan et al. in view of Barnes.

Regarding claims 1-5, Kan et al. disclose (see Figure 1) a method comprising: receiving incident light intended for a receptor (7); receiving the incident light into a beamsplitter (5); refracting part of the incident light to a sensor (10), wherein the sensor is in a first plane and the incident light is in a second plane; identifying a portion of the incident light that exceeds a predetermined threshold intensity; and adjusting the opacity of a first plurality of cells of a matrix corresponding to the portion. Kan et al. do not specifically disclose identifying a bright light source and a direction of sight of the receptor, comparing a first intensity value to a threshold, identifying an axis as claimed. Barnes teaches (see Figure 4 and columns 7-8) identifying a bright light source (sun vector) in the incident light; identifying a direction of sight of a receptor (34); and adjusting the opacity of a first plurality of cells of the matrix when the direction of sight approaches the bright light source. Barnes further teaches (see column 8, lines 30-60) associating a first intensity value to the incident light; and comparing the first intensity

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value to the predetermined threshold intensity. Barnes also teaches (see column 8, lines 45-60) identifying an axis or a second axis (light of sight of the pupils) between the receptor in a first position or second position and a source, wherein the axes intersect the matrix; and adjusting the opacity of the first plurality of cells of the matrix which are substantially near the intersection of the axes. Thus, Barnes further recognizes that better detection is obtained by shading the receptor from bright light sources and detecting a direction of sight of the receptor. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to identify a bright light source and a direction of sight of the receptor as claimed in the method of Kan et al. in view of Barnes et al. to improve visibility for a users by reducing glare at selective points.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kan et al. in view of Barnes, and further in view of Horn (U.S. Patent 4,848,890).

Regarding claim 9, Kan et al. in view of Barnes disclose the claimed invention as set forth above. Kan et al. and Barnes do not specifically disclose taking parallax into account when adjusting the opacity of the first plurality of cells. Horn teaches (see column 3, lines 20-30) compensating for parallax in adjusting the opacity of a matrix. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to select the first plurality of cells based upon a parallax effect the method of Kan et al. in view of Barnes to provide more accurate adjustments.

9. Claims 51-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Resnikoff et al. (U.S. Patent 6,244,703) in view of Kan et al.

Regarding claims 51 and 52, Resnikoff et al. disclose (see Figures 3A-3C) a method comprising: identifying a source of bright light (36) in incident light, the incident light to be received by a receptor (eye); a portion of the incident light falls to a sensor (see Figure 1; element 24a); determining the angle between the source of bright light and the direction of sight of the receptor (see Figure 3B and 3C); and adjusting the opacity of at least one cell in a shading matrix (16) based on the angle. An active zone and passive zone inherently is defined in the scene, since part of the scene is closer to the bright light and part of the scene is farther away from the bright light. Resnikoff et al. do not specifically disclose redirecting a portion of the incident light to the sensor. Kan et al. teach (see Figure 2) redirecting a portion of incident light to a sensor. Kan et al. recognize that more accurate detection is obtained by splitting or redirecting incident light to a sensor. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to redirect a portion of light to the sensor of Resnikoff et al. in view of Ken et al. to obtain a more accurate detection method.

Regarding claims 53 and 54, Resnikoff et al. in view of Ken et al. disclose the claimed invention as set forth above. Resnikoff et al. and Ken et al. do not specifically disclose adjusting the opacity of fewer cells when the angle is in the active zone. However, Resnikoff et al. and Ken et al. do teach adjusting cells around the bright light. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to adjust fewer cells around only the bright light in an active zone in the method of Resnikoff et al. in view of Ken et al. to improve operation by reducing only glare and not visibility.

R sponse to Arguments

10. Applicant's arguments filed May 15, 2003 have been fully considered but they are not persuasive.

Regarding claims 11-22, Applicant asserts that Kan et al. do not disclose a matrix disposed between the light deflector and the receptor. Examiner disagrees. Figure 2 of Kan et al. clearly shows a matrix (16) disposed between the light deflector (5) and the receptor (7). Thus, claims 11-22 remain anticipated or obvious over Kan et al.

Regarding claims 39-42, Applicant asserts that Barnes does not disclose the sensor in a plane different from a plane of the shading matrix. Examiner disagrees. Figure 4 of Barnes clearly shows a sensor (10) in a plane different from a plane of the shading matrix (8). Thus, claims 39-42 remain anticipated by Barnes.

Applicant's arguments with respect to claims 1-5, 7-9 and 51-53 have been considered but are moot in view of the new ground(s) of rejection.

Thus, as set forth above, this rejection is proper.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X. Luu whose telephone number is (703) 305-0539. The examiner can normally be reached on Monday-Friday from 6:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta, can be reached on (703) 308-4852. The fax phone number for the organization where the application or proceeding is assigned is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

txl
August 4, 2003



Thanh X. Luu
Patent Examiner